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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,917	12/21/2001	Jay Dee Krull	1528.003US1	5913

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EXAMINER

NGUYEN, TAN QUANG

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,917

Applicant(s)

KRULL ET AL.

Examiner

TAN Q NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 20-45 is/are rejected.
- 7) ☒ Claim(s) 18, 19 and 46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAIL ACTION

Notice to Applicant(s)

1. This office action is response to the Request for Continued Examined (RCE) filed on September 16, 2004. As per request, claims 16 and 34 have been amended. Claims 43-46 have been added. Thus, claims 1-46 are still pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-6, 8, 10-17, 20-25, 27 and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe (6,088,652) in view of Berstis (6,182,010) and Nanba et al. (5,739,772).

5. With respect to claims 1-3, 5, 10 and 43, Abe discloses an electronic navigation aid device which includes a processor (see figure 1, item 1), a memory for storing cartographic data and route to a desired destination (see figure 1), a display for displaying cartographic data and an enlarge display of an intersection (a decision point) which the vehicle is approaching (see the abstract and figure 4).

6. Abe does not explicitly disclose that the enlarged display is an overlay screen on top of any presently display screen. However, such feature is well shown in at least figure 5 of the Berstis reference. It would have been obvious to one of ordinary skill in the to incorporate the teaching of Berstis into the system of Abe in order to superimpose the enlarge display of an intersection when the vehicle is approaching to the that intersection while maintaining the display of the planned route, thereby not only allow the driver to see the detail intersection but also see the overview the current status of the position of the vehicle.

7. Abe and Berstis disclose the claimed invention as discussed above except for the portion of the course is highlighted through the decision point and display motion of device on the course through the decision point. However, Nanba et al. do suggest the calculated route is highlighted to provide more clearly such route through the intersection, i.e. the decision point (see at least figure 14 and the related text). Nanba et al. further disclose the display motion of the device on the course through the decision point (see at least figure 14, mark A is the current position of the vehicle on the course; figures 11, 12 and the related text). It would have been obvious to one of ordinary skill in the art to incorporate the teaching of Nanba et al. into the systems of

Abe and Berstis in order to provide more visual the detail of the course approaching the intersection and also follow through pass such intersection.

8. With respect to claims 4, 22 and 44, Abe further discloses that the screen is enlarged (magnified display) depends on a road classification for a thoroughfare on which the device is currently traveling (see at least the abstract).

9. With respect to claim 6, Abe does not explicitly disclose the geographic detail includes a marker centered at the decision point. However, Berstis does disclose that marker at the enlarge image for the driver to know the current status of the vehicle (see at least figure 5, item 96) which would have been obvious to an ordinary skill in the art to combine it with the system of Abe in order to provide a better view regarding the decision point.

10. With respect to claim 8, Abe disclose that the system includes the current vehicle is checked regularly to see when the vehicle is approach to the intersection (see at least figure 4, steps 46-52).

11. With respect to claim 25, Abe does disclose GPS for detecting the position of the vehicle (see at least column 6, lines 51-54).

12. With respect to claims 11, 12 and 45, Abe further discloses that the detail intersection is displayed based on the speed of the vehicle (see at least the abstract).

13. With respect to claims 13-17, 20, 21, 23, 24 and 27, the limitations of these claims have been noted in the rejection above and in the references above. They are therefore considered rejected as set forth above.

14. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abe, Berstis and Nanba et al. as applied to the claims above, and further in view of Yokoyama (6,263,276).

15. Abe, Berstis and Nanba et al. disclose the claimed invention as discussed above except for the set of travel habits is stored in the memory. However, Yokoyama et al. suggest a communication navigation system which includes a driver route history memory area for storing travel habits (see at least the abstract and figure 1). It would have been obvious to one of ordinary skill in the art to combine the teaching of Yokoyama, Abe, Berstis and Nanba et al. in order to provide the system with the enhanced capability of reducing the route calculation time by taking the travel habits into account.

16. Claims 9 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe, Berstis and Nanba et al. as applied to the claims above, and further in view of Kaneko (5,729,109).

17. Abe, Berstis and Nanba et al. disclose the claimed invention as discussed above except for the use of audio instructions to navigate along the route as well as through a course at the decision point. However, such audio output for guiding the vehicle along the planned route and also toward the intersection as shown in at least the abstract and figures 2-9 of the Kaneko et al. It would have been obvious to one of ordinary skill in the art to incorporate the teaching of Kaneko et al. into the systems of Abe, Berstis and Nanba et al. to not only provide the visual guidance but also the audio guidance to driver to improve the navigation system.

18. Claims 28-33 and 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe, Berstis and Nanba et al. as applied to the claims above, and further in view of Harada (6,052,645).

19. Abe, Berstis and Nanba et al. disclose the claimed invention as discussed above except for the use of server and the communication between the navigation system

onboard the vehicle and the server. However, such limitation is shown in the Harada reference in at least the abstract and figures 1-5. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Abe system by incorporate the communication with the server in order obtain the detail map via the server, thereby reducing the required capacity of the onboard memory of the vehicle.

20. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abe, Berstis, Nanba et al. and Harada as applied to the claims above, and further in view of Yokoyama (6,263,276).

21. Abe, Berstis, Nanba et al. and Harada disclose the claimed invention as discussed above except for the set of travel habits is stored in the memory. However, Yokoyama et al. suggest a communication navigation system which includes a driver route history memory area for storing travel habits (see at least the abstract and figure 1). It would have been obvious to one of ordinary skill in the art to combine the teaching of Yokoyama, Abe, Berstis, Nanba et al. and Harada in order to provide the system with the enhanced capability of reducing the route calculation time by taking the travel habits into account.

22. Claims 18, 19 and 46 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

23. The prior arts of record do not show that the device is adapted to remove insignificant detail from the geographic detail at the decision point based on whether a nearby thoroughfare intersects with a thoroughfare on which the device is currently traveling as recited in claim 46.

Remarks

24. Claims 1-17 and 20-45 are rejected. Claims 18, 19 and 46 are objected.

25. Applicant's arguments filed on September 16, 2004 have been fully considered and they are partially deemed to be persuasive.

26. In the amendment, applicants essentially argue that the references cited fail to disclose "a highlighted portion indicating a course to follow through the decision point, and the overlay screen displays motion of the device on the course through the decision point on the overlay screen" and there is no suggestion or motivation to combine the teachings of Abe, Berstis and Nanba. However, upon examination of the claims, the references cited clearly cover the subject matter AS CLAIMED by the applicants. First of all, the first reference, Abe, disclose the a navigation having a display for guiding the user to a destination, in which when the vehicle is approaching an intersection, an enlarge display of the preview intersection is displayed for the user to have a better, more detail about that intersection. The secondary reference Berstis do suggest the pop-up window (same as an overlay screen) on top of any presently displayed screen for the enlarge view of the decision point together with the direction arrow as shown in figure 5. Such teaching would have motivated an ordinary skill to incorporate into the Abe reference in order to see both 2 viewing, one is the large scale and one is the small scale in order to not only see the great detail of the approaching intersection, but also can viewing the general current location of the vehicle on the larger scale. Since the only missing is the highlighted portion and the displays motion of the device on the course through the decision point. Fortunately, the third reference, Nanba does suggest the enlarge view with the highlighted portion (the advance direction guidance information with two arrows as shown in figure 14) and displays motion of the device on the course through the decision point (traffic light/intersection) as shown in figure 14, the

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current position is indicated by a mark of a triangle encircled by a circle and the advance direction guidance information through the decision point as shown with two arrows. It would have been obvious to one of ordinary skill in the art to use the enlarge view screen as taught by Nanba in place of the one in Berstis in order to provide a better view for the driver, which means provide an enlarge view of the decision point, with the highlighted portion through the decision point and the motion of the device (start at the current position A). The all three references used do read on the claimed invention and the same as in the figure 8 of the present application. Therefore, the rejection under 35 U.S.C. § 103 is considered to be proper and do have the motivation to combine.

27. Applicant further argued that none of the references made of record disclose the limitation of claims 4, 22 and newly added claim 44. The new ground of rejection has been set forth above.

28. Applicants argued that "none of the references made of record discloses removing such insignificant detail from an overlay screen as of claims 18 and 46. The argument is persuasive and thus, those claims have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Tan Nguyen, whose telephone number is (703) 305-9755. The examiner can normally be reached on Monday-Thursday from 5:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black, can be reached on (703) 305-8233.

Any response to this action should be mailed to:

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Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

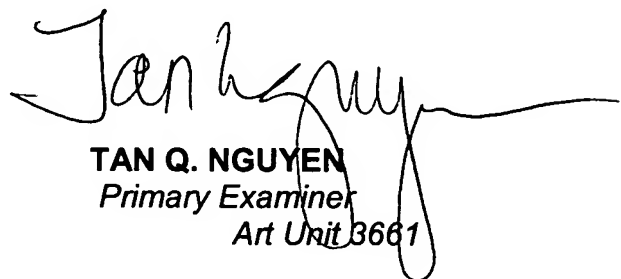
(703) 872-9306, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park V, 2451
Crystal Drive, Arlington, VA., Seventh Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be
directed to the Group receptionist whose telephone number is (703) 308-1113.

Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
published applications may be obtained from either Private PAIR or Public PAIR.
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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should
you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

/tqn
Friday, October 29, 2004


TAN Q. NGUYEN
Primary Examiner
Art Unit 3661